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09/538,602	03/29/2000	Brian P. Dougherty	4562 US	6189

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EXAMINER	
DEMICCO, MATTHEW R	

ART UNIT	PAPER NUMBER
2611	8

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/538,602	DOUGHERTY ET AL.	
	Examiner	Art Unit	
	Matthew R Demicco	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 March 2000*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-47* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24,26-35 and 39-47* is/are rejected.

7)☒ Claim(s) *25 and 36-38* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 March 2000* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *5 and 7*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: Figure 2, 226 and 228; Figure 8, 800-808, 810-812, 826 and 850. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The disclosure is objected to because of the following informalities: On Page 21, Line 3, "392" is misplaced. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-2, 4-11, 14-24, 28-35 and 42-43 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,774,664 to Hidary et al.

Regarding Claim 1, Hidary discloses a computer-implemented method of controlling the reception of an interactive application (web page) comprising the use of a scheduling calendar (electronic program guide) to allocate time periods for transmitting Internet URLs coinciding with television programming (Cols. 5-6, Lines 66-8). This scheduled reads on the claimed determining, using an electronic program guide, a timing offset (Col. 6, Lines 18-29) object comprising a time code which allows web pages to be synchronized to a particular frame of the video (Col. 8, Lines 59-60). This reads on the claimed timing offset relative to the start of the broadcast program. The URL reads on the claimed interactive application object. As is well known in the art, a URL consists of a protocol section (such as HTTP, FTP, Telnet, etc.), an address, a resource, and an action or parameter to pass to the resource. The URL therefore initiates an action based on the parameters. This reads on the claimed action to take with regards to the interactive application. The Web page is retrieved and displayed in synchronization with the video content (Col. 7, Lines 21-29). This reads on the claimed performing the action of the interactive application object at the timing offset to maintain synchrony of the interactive application with the display of the broadcast program.

Regarding Claim 2, Hidary discloses a method as stated above in Claim 1 wherein Internet web pages are synchronized to video content as stated above using a database schedule. Each program has specific web pages associated with it (Col. 8, Lines 39-42). Therefore, it is inherent that in addition to the timing information of the broadcast program, the channel information must be provided in order to properly synchronize the relevant web pages to the proper channels of programming. This reads on the claimed providing of timing information of the program and channel information of the broadcast program as inputs to the electronic program guide to determine the broadcast program. A timing offset object associated with the determined broadcast program is determined in order to sync and display appropriate web content for the show that is being watched.

Regarding Claim 4, Hidary discloses a method as stated above in Claim 1 wherein the action to take is displaying a web page as stated above. This reads on the claimed triggering or starting the interactive application.

Regarding Claim 5, Hidary discloses a method as stated above in Claim 1 wherein the interactive application is an Internet web page. This reads on the claimed interactive content.

Regarding Claim 6, Hidary discloses a method as stated above in Claim 1 wherein the interactive application object is a URL. This reads on the claimed identifier of interactive content. As is well known in the art, a URL is used to identify a protocol, host and resource to connect to in order to receive data. This reads on the claimed performing the action on the interactive application object comprising determining from the identifier

the interactive application object it identifies and performing the action on the identified object.

Regarding Claims 7-8, Hidary discloses a method as stated above in Claim 6 wherein the identifier is a URL. This reads on the claimed pointer to a network source for interactive content.

Regarding Claim 9, Hidary discloses a method as stated above in Claim 1 wherein the interactive application object is a URL as stated above and performing the action further comprises retrieving interactive content from a server on the Internet referenced by the URL as is well known in the art and displaying the content as stated above. This displaying reads on the claimed performing the action on the retrieved interactive content.

Regarding Claim 10, Hidary discloses a system for referencing an electronic program guide to facilitate the control of the reception of an interactive application as stated above comprising an application server (Col. 5, Lines 34-46) for determining from the scheduling calendar (Col. 5, Lines 66-67) a URL for transmission to users. As stated above, time and channel data are required to properly match the URL to the programming content. This reads on the claimed determining from the program guide a program based on time and channel information. Further, based on this program, a URL is delivered to the user. This URL, as stated above, dictates an action to take to retrieve and provide interactive content coordinated with the broadcast program. As is well known in the art, the receiving equipment uses the URL to request interactive content, which is then delivered. Further disclosed is customer premise equipment (Col. 5, Lines 7-20) coupled

to the application server (See Figure 2) for receiving and displaying the content as stated above.

Regarding Claim 11, see Claim 10 above. Hidary discloses a method wherein the client system handles the processing of the URL from the video stream without the use of an intermediate server (Col. 5, Lines 22-33).

Regarding Claim 14, Hidary discloses a computer implemented method of controlling the broadcast and reception of an interactive application comprising determining, using and electronic program guide, a web site associated with a broadcast program as stated above. This web site reads on the claimed interactive application. Further disclosed is controlling the web site to maintain synchrony with the display of the broadcast program as stated above.

Regarding Claim 15, Hidary discloses a method as stated above in Claim 14 further comprising determining timing offsets associated with the broadcast program wherein controlling the web page to maintain synchrony with the display of the broadcast program is done in accordance with the timing offsets as stated above.

Regarding Claim 16, Hidary discloses a method as stated above in Claim 15 wherein a URL is associated with a program in the program schedule as stated above. This URL reads on the claimed program identifier. The URL points to a web page (interactive application) associated with the broadcast program as stated above.

Regarding Claim 17, Hidary discloses a method as stated above in Claim 15 wherein determining, using the program schedule, an interactive application associated with a broadcast program comprises determining, from the schedule, an identifier as

stated above. The identifier is a URL. The URL is used to determine an interactive application (web page) associated with the program as stated above.

Regarding Claim 18, see Claim 17 above. The URL provides an identifier of a web page resource on the Internet. The receiver then uses the web page resource identifier to locate and retrieve the web page. This reads on the claimed determining from the identifier of the interactive application, an interactive application associated with the broadcast program.

Regarding Claim 19, see Claim 18 above.

Regarding Claim 20, see Claim 19 above.

Regarding Claim 21 and 22, see Claim 18 above.

Regarding Claim 23, Hidary discloses a method as stated above in Claim 15 wherein the timing offset data may be transmitted to the user from an Internet server instead of being embedded in the television programming (Col. 5, Lines 34-46). This reads on the claimed receiving timing offsets associated with the broadcast program from an external source.

Regarding Claim 24, Hidary discloses a method as stated above in Claim 23 wherein the external source is a remote server as stated above and receiving the timing offsets comprise accessing the remote server via the Internet and downloading the timing offsets as stated above.

Regarding Claims 28 and 29, Hidary discloses a method as stated above in Claim 15 wherein determining timing offsets associated with the broadcast program comprises receiving a URL constructed from data in the program schedule as stated above. The

URL reads on the claimed program identifier and contains timing offset data (Col. 6, Lines 18-19) associated with the broadcast program.

Regarding Claim 30 see Claims 28 and 29 above. Further, a URL, as stated above, contains an identifier of an interactive application associated with the program, which includes timing data as stated above. This reads on the claimed determining from the identifier of the interactive application, timing offsets associated with the broadcast program.

Regarding Claim 31-34, see Claims 28-30 above.

Regarding Claim 35, Hidary discloses a method as stated above in Claim 15 wherein the broadcast program is a television show (Col. 1, Lines 65-66). Hidary further discloses determining from the timing offset that a web page is to be displayed at a time relative to the beginning of the television show as stated above. It is inherent that an internal command is generated to execute the retrieval and display of the web page at the given time.

Regarding Claim 42, Hidary discloses a method as stated above in Claim 15. As stated above, the scheduling database is stored on a server. This reads on the claimed method wherein the electronic program guide resides primarily on a server remote from a viewer's own equipment.

Regarding Claim 43, Hidary discloses a method as stated above in Claim 15. Hidary further discloses that the customer equipment is enabled to run a web browser (Col. 7, Lines 11-14). This reads on the claimed interactive application being run at least primarily on a viewer's own equipment.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 3, 12-13, 26-27, 39, 41 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hidary et al.

Regarding Claim 3, Hidary discloses a method as stated above in Claim 1. Hidary further discloses providing timing information and channel information of the broadcast program as inputs to the program guide to determine the broadcast program and determining a timing offset associated with the program as stated above in Claim 3. Hidary further discloses a network broadcaster developing a master schedule for use with various affiliates (Col. 6, Lines 52-54). What is not disclosed, however, is providing location information of the broadcaster of the broadcast program. Official Notice is hereby taken that it is well known in the art to provide location information of the broadcaster in a program guide such that client devices are enabled to filter out and receive only data relevant to the broadcaster/broadcast area to which they belong. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of Hidary with the broadcaster location of the well-known prior art in order to enable the receivers to filter out only channels and data being carried by their local affiliates from the master schedule.

Regarding Claim 12, Hidary discloses a system for facilitating the control of the reception of an interactive application comprising an electronic program guide for receiving time and channel information as inputs and outputting an identifier of a broadcast program as stated above. Further disclosed is a server that provided the link file records including the URLs to the user's computer (Col. 6, Lines 32-41). This local or distributed network of servers reads on the claimed timing offsets database for receiving the identifier of the broadcast program output by the electronic program guide as input and outputting a URL. The URL includes an identifier of the interactive content, an action to take on the identified interactive content and a time at which to take the action (Col. 6, Lines 18-19). Further disclosed is user equipment as stated above for receiving the URL and retrieving and displaying the interactive content referenced by the URL with the broadcast program being displayed at the time and on the channel as stated above. This reads on the claimed "interactive content database".

Regarding Claim 13, Hidary discloses a method as stated above in Claim 12 wherein the output interactive content is a URL identifying a location on a server on the Internet from which the interactive content can be retrieved as stated above.

Regarding Claim 26, Hidary discloses a method as stated above in Claim 23 wherein the timing data may originate from a network broadcaster (Col. 6, Lines 42-49) for various affiliates. The timing offsets are embedded in the VBI of the broadcast program (Col. 5, Lines 34-39). It would be obvious to one having ordinary skill in the art that the network broadcaster may be a national broadcaster.

Regarding Claim 27, Hidary discloses a method as stated above in Claim 15. What is not disclosed is that timing offsets associated with the broadcast program are determined from the interactive application. Official Notice is hereby taken that it is well known in the art that a web page may include a meta tag specifying a timing offset in which to refresh content on the same, or a different page (meta-redirect). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of Hidary with the interactive application-based timing offsets in order to allow one web site to reference another after a predetermined timing offset in order to establish a timed "chain" of events without relying on embedding each timing command in the VBI.

Regarding Claim 39, Hidary discloses a method as stated above in Claim 15. As stated above, timing, channel and location of the broadcaster information are determined for the broadcast program and used as inputs to the program guide to determining an interactive application as stated above.

Regarding Claim 41, Hidary discloses a method as stated above in Claim 15. What is not disclosed is that the program guide resides at least primarily on a viewer's own consumer premise equipment. Official Notice is hereby taken that it is well known in the art to store several days or weeks worth of EPG data on a user's terminal. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Hidary with the local storage of the well-known prior art in order to increase the speed of access of the scheduling data.

Regarding Claim 44, Hidary discloses a method as stated above in Claim 15. What is not disclosed, however, is that the interactive application is run primarily on a server remote from a viewer's own equipment. Official Notice is hereby taken that it is well known in the art to run an application on a remote server and feed only basic video and I/O to a client side. Such systems include remote access systems such as X11 and Citrix. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of Hidary with the remote access of the well-known prior art in order to reduce cost by providing user equipment with reduced capabilities run from a single powerful server.

8. Claims 40 and 45-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hidary et al. in view of U.S. Patent No. 6,415,438 to Blackketter et al.

Regarding claim 40, Hidary discloses a method as stated above in Claim 15. Further disclosed are executing commands from an interactive server based on timing offsets as stated above including commands to schedule and start the display of a web page. What is not disclosed, however, are commands to stop and cancel interactive applications for the broadcast program associated with the timing offsets at corresponding times determined by the timing offsets. Blackketter discloses an interactive television trigger having a time attribute (See Abstract) that includes a life span attribute (Col. 8, Lines 15-38). Blackketter is evidence that ordinary workers in the art would recognize the benefits of stopping or canceling an interactive application at a certain timing offset. Therefore, it would have been obvious to one having ordinary skill

in the art at the time the invention was made to modify the method of Hidary with the life span attribute of Blackketter in order to limit the time certain applications are displayed on the screen to allow time for other applications to be displayed and to allow a higher level of control over the user's display.

Regarding Claim 45, Hidary discloses a computer-implemented method of controlling the reception of at least one interactive application (web page). Hidary further discloses using an electronic program guide (schedule database) to determine a list of interactive applications associated with a broadcast program as stated above. What is not disclosed, however, is pre-fetching the listed interactive applications and storing the pre-fetched interactive applications. Blackketter discloses a system as stated above wherein a receiver is operable to pre-fetch information resources so that they are available at the future time the trigger is to be executed (Col. 3, Lines 2-5). Further, it is inherent that the data must be stored once it is pre-fetched, in order to be available at a later time. Blackketter is evidence that ordinary workers in the art would recognize the benefits of pre-fetching and storing data for later use. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of Hidary with the pre-fetching of Blackketter in order to instantly display the interactive data when the trigger is enabled. What Hidary in view of Blackketter do not disclose, however, is that the interactive application is inserted into the broadcast stream in response to the trigger. Hidary discloses that the URL data may be embedded in the television program stream. Official Notice is hereby taken that it is well known in the art to transmit additional data including interactive applications in the broadcast stream.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of Hidary in view of Blackketter with the in-band data transmission of the well-known prior art in order to enable a user to receive interactive applications even if they do not have a costly secondary connection to the Internet.

Regarding Claim 46, Hidary discloses a computer-implemented method of controlling the reception of at least one interactive application. Hidary further discloses determining at a consumer's premise equipment, using an electronic program guide, a list of interactive applications associated with a broadcast program as stated above. Hidary also discloses receiving a trigger for one of the fetched applications and displaying the application in response to the trigger. What is not disclosed, however, is pre-fetching the listed interactive application and storing them in a storage device coupled to the CPE. Blackketter discloses a system as stated above wherein a receiver is operable to pre-fetch information resources so that they are available at the future time the trigger is to be executed (Col. 3, Lines 2-5). Further, it is inherent that the data must be stored once it is pre-fetched, in order to be available at a later time. Blackketter is evidence that ordinary workers in the art would recognize the benefits of pre-fetching and storing data for later use. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the method of Hidary with the pre-fetching of Blackketter in order to instantly display the interactive data when the trigger is enabled.

Regarding Claim 47, Hidary in view of Blackketter disclose a method as stated above in Claim 45. Hidary further discloses that the trigger may be received via the VBI of the broadcast stream (Col. 4, Lines 40-47).

Allowable Subject Matter

9. Claims 25 and 36-38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. U.S. Patent No. 5,585,858 to Harper et al. discloses a simulcast of interactive programming using trigger points for the placement of graphics and program content at designated times.

b. U.S. Patent No. 5,931,908 to Gerba et al. discloses an interactive audiovisual system with synchronized related content.

c. U.S. Patent No. 6,256,785 to Klappert et al. discloses a digital video system with a link and synchronization data.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew R Demicco whose telephone number is (703) 305-8155. The examiner can normally be reached on Mon-Fri, 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on (703) 305-4380. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MRD
mrd
May 26, 2004

HAITRAN
PATENT EXAMINER